

Appln. Serial No. 09/773,054
Amendment Dated January 15, 2009
Reply to Office Action Mailed October 15, 2008

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AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1 1 – 4. (Cancelled)

1 5. (Previously Presented) A method for servicing an inkjet printer including an
2 inkjet printhead with a nozzle plate and a first service module removably installed on the printer,
3 comprising:
4 identifying a printhead-related service condition not adequately addressed by servicing
5 the printer with the first service module being in an un-worn condition;
6 providing a second service module with a service function different from the first service
7 module and adapted to address said printhead-related service condition, the second service
8 module removably installable on the printer;
9 removing the first service module from the printer;
10 installing the second service module in the printer in place of the first service module;
11 using the second service module, conducting a special printhead-related servicing
12 operation.

1 6. (Previously Presented) The method of claim 5, further comprising:
2 after completion of the special printhead-related servicing operation, removing the
3 second service module from the printer; and
4 installing the first service module in the printer in place of the second service module.

Appln. Serial No. 09/773,054
Amendment Dated January 15, 2009
Reply to Office Action Mailed October 15, 2008

1 7. (Previously Presented) A method for servicing an inkjet printer including an
2 inkjet printhead with a nozzle plate and a first service module removably installed on the printer,
3 comprising:
4 identifying a printhead-related service condition not adequately addressed by servicing
5 the printer with the first service module being in an un-worn condition;
6 providing a second service module with a service function different from the first service
7 module and adapted to address said printhead-related service condition, the second service
8 module removably installable on the printer and in place of the first service module;
9 providing a set of instructions for using the second service module with the inkjet printer
10 to the printer user, wherein the step of providing a set of instructions includes providing a set of
11 machine readable printer instruction code for loading into the printer.

1 8. (Previously Presented) The method of claim 7 wherein the printer is controlled
2 by a host computer, and wherein the step of providing the set of instructions includes
3 downloading the set of printer instruction code from the host computer.

1 9 – 13. (Cancelled)

1 14. (Previously Presented) A method for servicing an inkjet printer including an
2 inkjet printhead with a nozzle plate and a first service module removably installed on the printer,
3 comprising:
4 identifying a printhead-related service condition not adequately addressed by servicing
5 the printer with the first service module being in an un-worn condition;
6 providing a second service module with a service function different from the first service
7 module and adapted to address said printhead-related service condition, the second service
8 module removably installable on the printer and in place of the first service module, wherein said
9 printhead-related service condition includes ink on a printhead carriage interconnect, and the
10 second service module includes a brush arranged to clean the interconnect.

Appln. Serial No. 09/773,054
Amendment Dated January 15, 2009
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1 15. (Currently Amended) A method for servicing an inkjet
2 printhead with a nozzle plate and a first service module removably installed on the printer,
3 comprising:
4 identifying a printhead-related service condition not adequately addressed by servicing
5 the printer with the first service module being in an un-worn condition;
6 providing a second service module with a service function different from the first service
7 module and adapted to address said printhead-related service condition, the second service
8 module removably installable on the printer and in place of the first service module, wherein said
9 printhead-related service condition includes vibration or shock incurred during shipment or
10 moving of the printer, and the second service module includes a special capping structure having
11 a range of movement along an axis generally perpendicular ~~transverse~~ to a nozzle array of the
12 printhead, and a bias structure which urges the capping structure toward and into engagement
13 with the printhead during a capping procedure.

1 16. (Original) The method of claim 15 wherein the special capping structure includes
2 a relative hard, non-resilient cap structure which contains the printhead during the capping
3 procedure.

1 17 - 18. (Cancelled)

Appln. Serial No. 09/773,054
Amendment Dated January 15, 2009
Reply to Office Action Mailed October 15, 2008.

1 19. (Previously Presented) A method for servicing an inkjet printer including an
2 inkjet printhead and a removable first service module, comprising:
3 providing a second service module different from the first service module and adapted to
4 address a printhead-related service condition not adequately addressed by the first service
5 module being in an un-worn condition, the second service module removably installable on the
6 printer and in place of the first service module;
7 providing a set of instructions for using the second service module with the inkjet printer
8 to the printer user, wherein the step of providing a set of instructions includes providing a set of
9 machine readable printer instruction code for loading into the printer;
10 installing the second service module in the printer;
11 conducting a printhead-related service operation using the second service module.

1 20. (Previously Presented) A method for servicing an inkjet printer including an
2 inkjet printhead and a removable first service module, comprising:
3 providing a second service module different from the first service module and adapted to
4 address a printhead-related service condition not adequately addressed by the first service
5 module being in an un-worn condition, the second service module removably installable on the
6 printer and in place of the first service module;
7 providing a set of instructions for using the second service module with the inkjet printer
8 to the printer user, wherein the printer is controlled by a host computer, and the step of providing
9 a set of instructions includes downloading the set of printer instruction code from the host
10 computer;
11 installing the second service module in the printer;
12 conducting a printhead-related service operation using the second service module.

1 21. (Canceled)

Appln. Serial No. 09/773,054
Amendment Dated January 15, 2009
Reply to Office Action Mailed October 15, 2008

1 22. (Previously Presented) A method for servicing an inkjet printer including an
2 inkjet printhead and a removable first service module, comprising:
3 providing a second service module different from the first service module and adapted to
4 address a printhead-related service condition not adequately addressed by the first service
5 module being in an un-worn condition, the second service module removably installable on the
6 printer and in place of the first service module;
7 installing the second service module in the printer;
8 conducting a printhead-related service operation using the second service module;
9 after completion of the printhead-related servicing operation, removing the second
10 service module from the printer; and
11 installing the first service module in the printer in place of the second service module.

1 23 – 26. (Cancelled)

1 27. (Previously Presented) A method for servicing an inkjet printer including an
2 inkjet printhead and a removable first service module, comprising:
3 providing a second service module different from the first service module and adapted to
4 address a printhead-related service condition not adequately addressed by the first service
5 module being in an un-worn condition, the second service module removably installable on the
6 printer and in place of the first service module;
7 installing the second service module in the printer;
8 conducting a printhead-related service operation using the second service module;
9 wherein said printhead-related service condition includes ink on a printhead carriage
10 interconnect, and the second service module includes a cleaning element arranged to clean the
11 interconnect during a special cleaning mode with the printhead removed from the carriage.

1 28 – 29. (Cancelled)

Appl. Serial No. 09/773,054
Amendment Dated January 15, 2009
Reply to Office Action Mailed October 15, 2008

1 30. (Currently Amended) An apparatus for use in an inkjet printing system including
2 an inkjet printhead and a standard service module removably installed in the printing system, the
3 apparatus comprising a special service module configured to be removably installed in the
4 printing system in place of the standard service module to perform a special service function on
5 the printhead which is not performed by the standard service module being in an un-worn
6 condition, the special service module removably installable ~~[[on]]~~ in the printing system printer
7 and in place of the standard service module, wherein the special service module includes a
8 housing and at least one component mounted to the housing to perform the special service
9 function.

1 31. (Previously Presented) A method for servicing an inkjet printer including an
2 inkjet printhead with a nozzle plate and a first service module removably installed on the printer,
3 comprising:
4 identifying a printhead-related service condition not adequately addressed by servicing
5 the printer with the first service module;
6 providing a second service module with a service function different from the first service
7 module and adapted to address said printhead-related service condition;
8 removing the first service module from the printer;
9 installing the second service module in the printer in place of the first service module;
10 using the second service module, conducting a special printhead-related servicing
11 operation;
12 after completion of the special printhead-related servicing operation, removing the
13 second service module from the printer; and
14 installing the first service module in the printer in place of the second service module.

Appln. Serial No. 09/773,054
Amendment Dated January 15, 2009
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1 32. (Currently Amended) A method for servicing an inkjet printer including an inkjet
2 printhead with a nozzle plate and a first service module removably installed on the printer,
3 comprising:

4 identifying a printhead-related service condition not adequately addressed by servicing
5 the printer with the first service module in an un-worn condition, said printhead-related service
6 condition including vibration or shock incurred during shipment or moving of the printer;

7 providing a second service module with a service function different from the first service
8 module and adapted to address said printhead-related service condition, wherein the second
9 service module includes a special capping structure having a range of movement along an axis
10 generally perpendicular ~~transverse~~ to a nozzle array of the printhead, and a bias structure which
11 urges the capping structure toward and into engagement with the printhead during a capping
12 procedure, and wherein the special capping structure including a relative hard, non-resilient cap
13 structure which contacts the printhead during the capping procedure; and

14 performing the capping procedure with the second service module installed in the printer,
15 and maintaining contact between the non-resilient cap structure and the printhead to prevent a
16 pumping action on the printhead when subjected to vibration and shock.

1 33. (Previously Presented) The method of claim 32, wherein a constant closed
2 volume is maintained between the cap structure and the printhead during the capping procedure.

1 34 – 44. (Cancelled)

1 45. (Previously Presented) An inkjet printing system, comprising:

2 an inkjet printhead;

3 a service area for performing service functions on the printhead;

4 a first service module for removable mounting at the service area to perform service

5 functions on the printhead during a standard printhead service mode;

6 a second service module for removable mounting at the service area in place of the first

7 service module to perform a different service function from that performed by the first service

8 module in an un-worn condition on the printhead during a special printhead service mode.

Appln. Serial No. 09/773,054
Amendment Dated January 15, 2009
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- 1 46. (Previously Presented) The system of Claim 45 further comprising:
- 2 a printhead carriage for mounting the printhead and arranged for traversing movement
- 3 along a print area and for moving to the service area;
- 4 a service carriage for removably mounting the first service module or the second service
- 5 module.